

Remarks

1. Summary of the Office Action

In the office action mailed December 29, 2005, the Examiner rejected claims 1-7, 10-16, and 20-24 under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent Application Pub. No. 2002/0022483 (Thompson), and the Examiner rejected the remaining dependent claims on grounds of alleged obviousness.

2. Status of the Claims

Applicant has amended claim 22 to correct a typographical error in dependency, where the claim recited dependency from claim 20 but should have recited dependency from claim 21. Still pending in this application are claims 1-24, of which claims 1, 12, 13, 21, and 23 are independent, and the remainder are dependent.

3. Response to Rejections

a. Overview

The Examiner rejected claims 1-7, 10-16, and 20-24 under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent Application Pub. No. 2002/0022483 (Thompson). Applicant submits that this rejection is in error and should be withdrawn, because Thompson does not disclose on its face all of the elements of any of these claims as would be required to establish anticipation under M.P.E.P. § 2131.

b. Claims

Each of independent claims 1, 12, 13, 21, and 23 includes the functions of receiving an indication that a subscriber has been authenticated by a particular service provider and responsively assigning the subscriber to operate in a particular logical layer of an access network.

Claims 1 and 12 distinguish logical layers (and thus handling of communications) according to the service provider that authenticated the user, namely, assigning a first subscriber to a first logical layer of the access network (e.g., first IP subnet) in response to receiving an indication that a first service provider authenticated the first subscriber, and assigning a second subscriber to a second logical layer of the access network (e.g., second IP subnet) in response to receiving an indication that a second service provider authenticated the second subscriber.

Claim 13 recites receiving from a subscriber-designated service provider an authentication response that indicates successful authentication by the service provider, and responsively assigning the subscriber to operate in a designated access network layer set aside for subscribers that have been authenticated by that particular service provider.

Claims 21 and 23 similarly recite the functions of receiving from a selected service provider an authentication response indicating that a client station has been authenticated by the service provider, and responsively restricting the client station to communications in a logical access network layer associated with that selected service provider.

c. Deficiency of Thompson

Thompson teaches a system that allows multiple wireless service providers (WSPs) to serve customers (users operating portable computing devices (PCDs)) via a common access point (AP) or access points. (See, e.g., Thompson, at paragraphs 35, and 148). According to Thompson, when a PCD comes within range of an AP, the PCD sends a signal to the AP, providing the AP with WSP identification information and with a device identifier (such as a MAC ID). Based on the provided WSP information, the AP then routes traffic from the PCD to a corresponding WSP device (e.g., wireless ISP) on the network, and the WSP may then provide the PCD with Internet access or other services. (Id. at paragraphs 38, 39). If the WSP

information does not correspond to a WSP recognized by the AP, then the AP may instead route traffic from the PCD to a default WSP device. (Id. at paragraph 43). Furthermore, based on the WSP designated by the PCD, the AP may use a corresponding "virtual AP" 802.11 stack so that the AP appears to be an AP provided by the designated WSP. (Id. at paragraphs 41, 96.) And the AP may communicate with the PCD on RF channels corresponding with the designated WSP. (Id. at paragraph 156).

In addition, the AP may limit access rights based on the user or PCD's service level, possibly allowing certain PCDs to obtain Internet connectivity but restricting others to certain local network access, or vice versa. (Id. at paragraphs 39, 140). For instance, airline employees may be given the right to access local resources via an airport AP, whereas airline customers may be restricted from accessing those local resources. (Id. at paragraph 141).

In all, Thompson seems to assume that, when a PCD designates a particular WSP that is one recognized by the AP, the PCD will be served by that WSP, and so the AP will route the PCD's traffic to that WSP. (Id. at paragraphs 85, 87). That seems to be done by rote in Thompson, conveniently allowing a user to seamlessly be served by the user's WSP through some other WSP's access point.

Yet Thompson does not teach receiving an indication that a subscriber has been authenticated by a given service provider and then responsively assigning the subscriber to operate in a particular logical layer of an access network as recited in Applicant's claims. Indeed, Thompson discloses very little, if anything, related to a service provider authenticating a subscriber.

At best, Thompson teaches at paragraph 150 that, if a user tries to connect to an AP owned by WSP-A ("XYZ") but the user is registered with (apparently a subscriber of) WSP-B

("Wayport") rather than WSP-A, then WSP-A's network may verify the identify of the user's PCD by querying WSP-B. However, Thompson does not teach assigning a PCD to operate on a particular logical layer of an access network in response to successful verification of the user's PCD. And, particularly, Thompson does not teach assigning a subscriber to operate in a particular layer of an access network in response to receipt of an indication that the subscriber was authenticated by a particular service provider.

Further, Thompson also teaches at paragraph 150 that WSP-A's network may determine if the user's credentials are acceptable or not and that WSP-A's network may (i) deny network access to a user if the credentials are unacceptable or (ii) allow network access to a user if the credentials are acceptable. (See also Thompson, at paragraph 119). Yet this Boolean allowance/denial of network access does not amount to allowing access at different logical layers in response to different service providers providing authentication, as in Applicant's claims.

Furthermore, Thompson does not teach receiving an indication that a subscriber has been authenticated by a given service provider and then responsively assigning the subscriber to operate in a layer of the network corresponding with that given service provider, as in Applicant's claims 13, 21, and 23. Rather, in Thompson, a subscriber simply designates a WSP, and the AP responsively directs traffic from that subscriber to that WSP. Any access-level differentiation imposed by the AP on a per-WSP basis in Thompson appears to be the result of the AP merely looking up in a WSP table (Figure 5 of Thompson) to determine what the access level is for that particular WSP. But that lookup in the WSP table appears to be done by rote in response to a PCD identifying the WSP that the PCD desires to use (see, e.g., Thompson, at paragraphs 125, 128, 161), not in response to receiving any sort of indication that the PCD was authenticated by the service provider.

Because Thompson fails to disclose or suggest all of the features recited in any of Applicant's independent claims, Thompson fails to anticipate any of the independent claims. Consequently, Applicant submits that the independent claims are allowable. Furthermore, Applicant submits that each of the dependent claims is allowable for at least the reason that it depends from an allowable claim. Applicant therefore submits that the rejections of all of the pending claims should be withdrawn, and the case should be passed to issuance.

In addition, Applicant notes that the Examiner has rejected dependent claim 5 as being allegedly anticipated by Thompson. However, the Examiner has not stated any basis to support this rejection. In particular, the Examiner has not asserted that Thompson teaches the element added by claim 5, namely, that the default-layer logic involves disallowing SIP communication and the first-layer logic involves allowing SIP communication. Because the Examiner did not allege that Thompson teaches the feature added claim 5, and because Thompson does not teach that added claim feature, the § 102 rejection of claim 5 is improper and should be withdrawn.

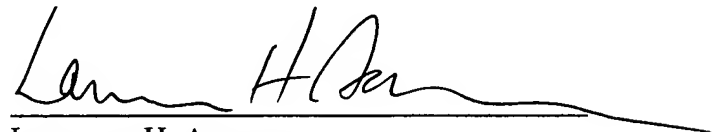
Should the Examiner wish to discuss this case with the undersigned, the Examiner is invited to call the undersigned at (312) 913-2141.

Respectfully submitted,

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By:



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